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10/523,393	08/23/2005	Thomas Bertin-Mourot	265017US6PCT	3870

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EXAMINER	
PERRY, ANTHONY T	

ART UNIT	PAPER NUMBER
2879	

NOTIFICATION DATE	DELIVERY MODE
11/18/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/523,393	BERTIN-MOUROT ET AL.	
	Examiner	Art Unit	
	ANTHONY T. PERRY	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/03/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The Amendment filed on 7/03/2008, has been entered and acknowledged by the Examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-27, 29, 31-33, 35-38, 45, 46, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (US 2002/0079826).

Regarding claim 25, Park discloses a flat lamp in comprising: at least two glass substrates (31 and 31a) kept mutually parallel and defined in an internal gas-filled space, each substrate having an internal surface facing the internal space and an external surface facing away from the internal space; two electrodes (33 and 33a) associated with the glass substrates and away from the internal surface, in which an internal face of at least one substrate turned toward the internal space is coated with a phosphor material (39 and 39a), wherein at least one of the electrodes is covered with at least one electrical insulation (35 and 35a) that may be formed by at least one of the glass substrates or be associated with at least one of the glass substrates (for example, see Fig. 3).

Regarding claim 26, Park discloses the flat lamp, wherein at least one electrode is affixed to the surface of the external face of the substrate with which it is associated and is covered with

at least one electrical insulation, the electrode being incorporated into the surface of the glass substrate or of the electrical insulation (for example, see Fig. 3).

Regarding claim 27, Park discloses the flat lamp, wherein at least one electrode is incorporated into the electrical insulation, either within its very thickness or on a surface (for example, see Fig. 3).

Regarding claim 29, Park discloses the flat lamp, wherein the electrical insulation associated with the electrode is assembled with one or more other additional electrical insulations (35 and 35a).

Regarding claim 31, Park discloses the flat lamp, wherein the electrical insulation a constitutes a sheet exhibiting an optical effect (for example, see Fig. 3).

Regarding claim 32, Park discloses the flat lamp, wherein the electrodes (33 and 33a) are continuous, conducting and transparent coatings, each located on an external face side of a substrate and covering at least part of facing surfaces of the substrates (for example, see Fig. 3).

Regarding claim 33, Park discloses the flat lamp, wherein the electrodes cover all of the external faces of the glass substrates (for example, see Fig. 3).

Regarding claim 35, Park discloses the flat lamp, wherein the electrodes are formed from a metal oxide having electronic vacancies (for example, see paragraph 0050).

Regarding claim 36, Park discloses the flat lamp, wherein at least one of the two electrodes is an integrated metal grid (33 and 33a), where appropriate inserted in between two plastic sheets, or the electrode is in a form of a layer (33 and 33a) deposited on and incorporated into a plastic film (for example, see Fig. 3).

Regarding claim 37, Park discloses the flat lamp, wherein at least part of the internal face of at least one of the two substrates is coated with a phosphor material (39 and 39a).

Regarding claim 38, Park discloses the lamp as claimed in claim 37, wherein the phosphor is selected to determine a color of illumination (for example, see paragraph 0052).

Regarding claim 45, Park the contour of the glass substrates is polygonal, concave or convex, or curved with a constant or variable radius of curvature (for example, see Fig. 3)..

Regarding claim 46, Park discloses the lamp having two illuminating faces (for example, see Fig. 3).

Regarding claim 48, Park discloses an application of the flat lamp in the production of architectural or decorative elements that illuminate and/or have a display function (for example, see Fig. 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 28, 34, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US 2002/0079826).

Regarding claim 28, Park discloses the lamp as claimed in claim 26, but does not specifically recite what type of dielectric material makes up the electrical insulation. However, glass and transparent plastic, such as, polyvinyl butyral (PVB), ethylene/vinyl acetate (EVA), or

polyethylene terephthalate (PET) are known dielectric materials used for covering electrodes in order to provide electrical insulation. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have reasonably contemplated using glass or of a transparent plastic of one of: polyvinyl butyral (PVB), ethylene/vinyl acetate (EVA), or polyethylene terephthalate (PET), as the electrical insulation, since the selection of known materials for a known purpose is within the skill of the art.

Regarding claim 34, Park discloses the flat lamp, wherein the continuous coatings (33a and 33) are in the form of an array of parallel band a non-conducting space between two adjacent bands, having a width greater than the width of the bands (for example, see Fig. 3). Park does not specifically disclose that the continuous coatings have a width between 3 and 15 mm, and, the coatings deposited on the two substrates being offset by 180° to prevent two opposed conducting bands of the two substrates from facing each other.

It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an appropriate range for the widths of the bands based on the lamps specific function or use, since optimization of workable ranges is considered within the skill of the art.

Park shows a lamp having the coatings on the two substrates being offset by 180° so that two opposed conducting bands (13a and 13) of the two substrates do not face each other (for example, see Fig. 2). It is noted that the applicant's specific relation of the two opposed bands

being offset so that they do not face each other, does not solve any of the stated problems or yield any unexpected result that is not within the scope of the teachings applied. Therefore it is considered to be a matter of choice, which a person of ordinary skill in the art would have found obvious to select any relational placement (facing one another as shown in Fig. 3 or offset so as not face one another as shown in Fig. 2) of opposing bands.

Regarding claim 43, Park does not specifically recite the gas pressure in the internal space being around 0.05 to 1 bar. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an appropriate range for the gas pressure of the lamp, since optimization of workable ranges is considered within the skill of the art.

Regarding claim 44, Park teaches a hole (not shown) in the lamp device that is sealed with a glass material (obstructed by a seal) after providing a gas within the discharge space (for example, see paragraph 0077).

Park does not specifically state that the hole is in one of the substrates. However, it is noted that the applicant's specific placement of the hole, does not solve any of the stated problems or yield any unexpected result that is not within the scope of the teachings applied. Therefore, it is considered to be a matter of choice, which a person of ordinary skill in the art would have found obvious to select any outer member of the flat lamp for providing the hole, as long as the hole is capable of providing a means for introducing gas into the envelope, and that can be sealed thereafter.

The Examiner notes that the claim limitation that the "hole is drilled" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Claims 30, 39, 40, 41-42, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US 2002/0079826) in view of Eliasson et al. (US 4,983,881).

Regarding claim 30, Park does not specifically teach the at least one additional electrical insulation is formed by another glass substrate that is laminated to at least one glass substrate by an intermediate film that can make the two substrates adhere to each other.

However, Eliasson discloses a flat lamp with an intermediate film (3) that allows the two substrates to adhere to each other. Eliasson teaches that by including the intermediate film, separation is maintained between two substrates. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have at least one additional electrical insulation formed by another glass substrate that is laminated to at least one glass substrate by an intermediate film that can make the two substrates adhere to each other, as taught by Eliasson, in order to maintain appropriate separation between the two substrates.

Regarding claim 39, Park does not specifically teach spacers, made of a non-conducting material, placed between the two glass substrates. Eliasson teaches a lamp with a spacer (3) between two substrates (1 and 2) to maintain separation between the two substrates. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the

invention was made to provide insulating spacers placed between the two glass substrates in order to maintain appropriate separation between the two substrates, as taught by Eliasson.

Regarding claim 40, the combined invention of Park and Eliasson does not specifically teach the separation between the two substrates being around 0.3 to 5 mm. However, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an appropriate range for the distance separating the two substrates (discharge space), since optimization of workable ranges is considered within the skill of the art.

Regarding claim 41, the combined invention of Park and Eliasson does not specifically teach the spacers being made of glass. However, it is well known in the art to form the spacers in such lamps from a glass material. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have used a glass material for the spacers, since the selection of known materials for a known purpose is within the skill of the art.

Regarding claim 42, the combined invention of Park and Eliasson disclose the lamp wherein a lateral surface of the spacers is coated with a phosphor material (for example, see Fig. 3).

Regarding claim 47, Park teaches a process for manufacturing a lamp as claimed in claim 25, comprising: optionally, depositing at least one electrode (33 and 33a) on one of the glass substrates (31 and 31a); screen-printing phosphor (39) on at least one of the glass substrates;

sealing an internal space by a peripheral sealing material; replacing atmosphere contained in the internal space, by the hole, with plasma gas; and obstructing the hole by a seal; optionally, joining at least one first electrical insulation (35) to at least one glass substrate, the electrical insulation configured to cover or to incorporate, internally or on a surface, the electrode (33) with which one of the faces of the substrate to be associated, or configured to cover the electrode that is associated with a second electrical insulation that is joined to the first electrical insulation; and joining the substrates together to be parallel (for example, see Fig. 3 and paragraph 0077).

Park does not specifically teach depositing spacers on one of the substrates. However, Eliasson discloses depositing spacers in order to maintain an appropriate spacing between the two substrates. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide spacers between the two substrates in order to maintain an appropriate separation between them.

Park and Eliasson do not specifically teach the hole being formed by drilling through a thickness of one of the substrates. However, it is noted that the applicant's specific method of drilling, does not solve any of the stated problems or yield any unexpected result that is not within the scope of the teachings applied. Therefore, it is considered to be a matter of choice, which a person of ordinary skill in the art would have found obvious to select any outer member of the flat lamp for providing the hole, as long as the hole is capable of providing a means for introducing gas into the envelope, and that it can be sealed thereafter.

Response to Arguments

Applicant's arguments filed 7/03/08 have been fully considered but they are not persuasive.

The examiner disagrees with the applicant's assertion that Park does not teach all of the limitations recited in claim 25 and 47. Figure 3 of the Park reference discloses each item in relation to the internal gas-filled space, as claimed (See rejections of claims 25 and 47, above.)

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding the arguments with respect to claim 30, the examiner notes that Figure 4 of the Elliason reference teaches two glass substrates (1 and 10) laminated to one another through an intermediate film (3) that connects ("can make the two substrates adhere to one another") the two substrates.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is **(571) 272-2459**. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. **The fax phone number for this Group is (571) 273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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